

Receipt date: 12/02/2011

PTO/SB/08a (07-09)

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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<i>Complete if Known</i>			
				Application Number		10/693,419	
				Filing Date		2003-10-23	
				First Named Inventor		WALTON; J. Rodney	
				Art Unit		2467	
				Examiner Name		SMITH, Marcus	
Sheet	1	of	9	Attorney Docket No: 020554			

/K.U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	001	US5479447	12-26-1995	CHOW; Peter S. et al.	
	002	US5790550	08-04-1998	PEETERS; Johan et al.	
	003	US5822374	10-13-1998	LEVIN; Howard E.	
	004	US6072779	06-06-2000	TZANNES; Marcos et al.	
	005	US6122247	09-19-2000	LEVIN; Howard E. et al.	
	006	US6205410	03-20-2001	CAI; Lujing	
	007	US6222888	04-24-2001	KAO; Chiihsin et al.	
	008	US6330277	12-11-2001	GELBLUM; Ehud Alexander et al.	
	009	US6426971	07-30-2002	WU; Qiang et al.	
	010	US6463290	10-08-2002	STILP; Louis A. et al.	
	011	US6478422	11-12-2002	HANSEN; Richard Arvid	
	012	US6510184	01-21-2003	OKAMURA; Yusaku	
	013	US6631121	10-07-2003	YOON; Sung-Hoon	
	014	US6744811	06-01-2004	KANTSCHUK; Amir	
	015	US6768727	07-27-2004	SOUROUR; Essam et al.	
	016	US6798738	09-28-2004	DO; Sang-Hyun et al.	
	017	US6821535	11-23-2004	NURMI; Juha et al.	
	018	US6891858	05-10-2005	MAHESH; Harihara et al.	
	019	US6927728	08-09-2005	VOOK; Frederick W. et al.	
	020	US6959171	10-25-2005	TSIEN; Chih C. et al.	
	021	US6980601	12-27-2005	JONES; David Charles	

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		Number-Kind Code <sup>2</sup> (if known)			
	022	US6985534	01-10-2006	MEISTER; Wolfgang	
	023	US7003044	02-21-2006	SUBRAMANIAN; Chandrasekarapuram A. et al.	
	024	US7006848	02-28-2006	LING; Fuyun et al.	
	025	US7039125	05-02-2006	FRIEDMAN; Vladimir	
	026	US7058367	06-06-2006	LUO; Hui et al.	
	027	US7127009	10-24-2006	BERTHET; Antoine et al.	
	028	US7130362	10-31-2006	GIRARDEAU; James et al.	
	029	US7137047	11-14-2006	MITLIN; Vlad et al.	
	030	US7184713	02-27-2007	KADOUS; Tamer et al.	
	031	US7191381	03-13-2007	GESBERT; David J. et al.	
	032	US7274734	09-25-2007	TSATSANIS; Michail	
	033	US7333556	02-19-2008	MALTSEV; Alexander A. et al.	
	034	US7356004	04-08-2008	YANO; Takashi et al.	
	035	US7379492	05-27-2008	HWANG; In Tae	
	036	US7508748	03-24-2009	KADOUS; Tamer	
	037	US7599443	10-06-2009	IONESCU; Dumitru M. et al.	
	038	US20020027951	03-07-2002	GORMLEY; Eamonn et al.	
	039	US20020044610	04-18-2002	JONES; David	
	040	US20020075830	06-20-2002	HARTMAN; David L. Jr.	

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	041	US20030003863	01-02-2003	THIELECKE; Jorn et al.	
	042	US20030039317	02-27-2003	TAYLOR; Douglas Hamilton et al.	
	043	US20030185311	10-02-2003	KIM; Yong-Woon	
	044	US20040076224	04-22-2004	ONGGOSANUSI; Eko N. et al.	
	045	US20040120411	06-24-2004	WALTON; Jay Rodney et al.	
	046	US20040151108	08-05-2004	BLASCO CLARET; Jorge Vicente et al.	
	047	US20040151122	08-05-2004	LAU; Kin Nang et al.	
	048	US20040184398	09-23-2004	WALTON; Jay Rod et al.	
	049	US20040252632	12-16-2004	BOURDOUX; Andre et al.	
	050	US20050047515	03-03-2005	WALTON; J. Rodney et al.	
	051	US20050135284	06-23-2005	NANDA; Sanjiv et al.	
	052	US20050135295	06-23-2005	WALTON; Jay Rodney et al.	
	053	US20050135318	06-23-2005	WALTON; Jay Rodney et al.	
	054	US20050147177	07-07-2005	SEO; Dong-Youn et al.	
	055	US20050185575	08-25-2005	HANSEN; Christopher J. et al.	
	056	US20050220211	10-06-2005	SHIM; Dong-Hee et al.	
	057	US20050276343	12-15-2005	JONES; David Charles	
	058	US20060018395	01-26-2006	TZANNES; Marcos C.	

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	059	US20060067417	03-30-2006	PARK; Chang-Soon et al.	
	060	US20060159120	07-20-2006	KIM; Joonsuk	
	061	US20060209894	09-21-2006	TZANNES; Marcos et al.	
	062	US20060209937	09-21-2006	TANAKA; Yoshinori et al.	
	063	US20080069015	03-20-2008	WALTON; J. Rodney et al.	
	064	US20080267098	10-30-2008	WALTON; J. Rodney et al.	
	065	US20080267138	10-30-2008	WALTON; J. Rodney et al.	
	066	US20100067401	03-18-2010	MEDVEDEV; Irina et al.	
	067	US20100119001	05-13-2010	WALTON; J. Rodney et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> - Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	068	CN1469662	01-21-2004	LG ELECTRONICS INC.		<input checked="" type="checkbox"/>
	069	CN1537371	10-13-2004	MATSUSHITA ELECTRIC IND CO LTD.		<input checked="" type="checkbox"/>
	070	EP0869647A2	10-07-1998	LUCENT TECHNOLOGIES INC [US]		<input type="checkbox"/>
	071	EP1126673A2	08-22-2001	THOMSON LICENSING INC [FR]		<input type="checkbox"/>
	072	EP1137217	09-26-2001	ERICSSON TELEFON AB L M [SE]		<input type="checkbox"/>

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		Country Code <sup>3</sup> -Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	073	EP1416688A1	05-06-2004	MOTOROLA INC [US]		<input type="checkbox"/>
	074	EP1447934A1	08-18-2004	INST EURECOM G I E [FR]		<input type="checkbox"/>
	075	JP06003956	01-14-1994	SEIKO EPSON CORP.		<input checked="" type="checkbox"/>
	076	JP10303794A	11-13-1998	MITSUBISHI ELECTRIC CORP.		<input checked="" type="checkbox"/>
	077	JP2000078105	03-14-2000	NEC CORP.		<input checked="" type="checkbox"/>
	078	JP2002232943A	08-16-2002	SONY CORP.		<input checked="" type="checkbox"/>
	079	JP2002504283	02-05-2002	AWARE INC.		<input checked="" type="checkbox"/>
	080	JP2003198442	07-11-2003	HITACHI LTD., et al.		<input checked="" type="checkbox"/>
	081	JP2004266586	09-24-2004	HITACHI LTD.		<input checked="" type="checkbox"/>
	082	JP2004297172	10-21-2004	SHARP CORP.		<input checked="" type="checkbox"/>
	083	JP2004535694	11-25-2004	QUALCOMM INCORPORATED.		<input checked="" type="checkbox"/>
	084	JP2005519520	06-30-2005	QUALCOMM INCORPORATED.		<input checked="" type="checkbox"/>
	085	JP2006504372	02-02-2006	QUALCOMM INCORPORATED.		<input checked="" type="checkbox"/>
	086	KR200011799	02-25-2000	SAMSUNG ELECTRONICS CO LTD [KR]		<input checked="" type="checkbox"/>
	087	KR20010098861	11-08-2001	NEC CORPORATION., et al.		<input checked="" type="checkbox"/>
	088	KR20030085040	11-01-2003	QUALCOMM INCORPORATED.		<input checked="" type="checkbox"/>
	089	RU2139633	10-10-1999	SAMSUNG ELECTRONICS CO., LTD.		<input type="checkbox"/>

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	090	RU2197781C2	01-27-2003	OLIVETTI TELEMEDIA SPA [IT]		<input type="checkbox"/>
	091	TW545006B	08-01-2003	WORLDSPACE MAN CORP [US]		<input checked="" type="checkbox"/>
	092	TW583842B	04-11-2004	KONINKL PHILIPS ELECTRONICS NV [NL]		<input checked="" type="checkbox"/>
	093	TWI230525	04-01-2005	QUALCOMM INCORPORATED.		<input type="checkbox"/>
	094	WO02093784A1	11-21-2002	QUALCOMM INC [US]		<input type="checkbox"/>
	095	WO03010994A1	02-06-2003	NEXO [FR], et al.		<input type="checkbox"/>
	096	WO03075479	09-12-2003	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	097	WO04038986	05-06-2004	QUALCOMM INCORPORATED,US.		<input type="checkbox"/>
	098	WO05041515	05-06-2005	QUALCOMM INC.		<input type="checkbox"/>
	099	WO05043855	05-12-2005	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	100	WO2004038985A2	05-06-2004	QUALCOMM INC [US]		<input type="checkbox"/>
	101	WO2005046113A2	05-19-2005	ATHEROS COMM INC [US], et al.		<input type="checkbox"/>
	102	WO86007223	12-04-1986	TELEBIT CORPORATION.		<input type="checkbox"/>
	103	WO9307684A1	04-15-1993	SIXTEL SPA [IT]		<input type="checkbox"/>
	104	WO9507578	03-16-1995	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	105	WO9736377A1	10-02-1997	MOTOROLA INC [US]		<input type="checkbox"/>
	106	WO9857472	12-17-1998	AWARE INC [US]		<input type="checkbox"/>

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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<i>Complete if Known</i>			
				Application Number		10/693,419	
				Filing Date		2003-10-23	
				First Named Inventor		WALTON; J. Rodney	
				Art Unit		2467	
				Examiner Name		SMITH, Marcus	
Sheet	7	of	9	Attorney Docket No: 020554			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>
		Country Code <sup>3</sup> -Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	107	WO99014878	03-25-1999	QUALCOMM INCORPORATED.		<input type="checkbox"/>

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T2
	108	GRUNHEID, R. et al., "Adaptive Modulation and Multiple Access for the OFDM Transmission Technique," Wireless Personal Communications 13: 5/13/2000, 2000 Kluwer Academic Publishers, pp. 4-13, XP000894156.				<input type="checkbox"/>
	109	LE GOFF, S. ET AL: "Turbo-codes and high spectral efficiency modulation," IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS, 1994. ICC '94, SUPERCOMM/ICC '94, CONFERENCE RECORD, 'SERVING HUMANITY THROUGH COMMUNICATIONS.' pp. 645-649, vol. 2, 1-5 MAY 1994, XP010126658, doi: 10.1109/ICC.1994.368804.				<input type="checkbox"/>
	110	Office Action dated August 13, 2008 for Australian Application Serial No. 2004223374, 2 pages.				<input type="checkbox"/>
	111	Office Action dated June 27, 2008 for Chinese Application Serial No.200480011307.6, 3 pages.				<input type="checkbox"/>
	112	SONG, Bong-Gee et al., "Prefilter design using the singular value decomposition for MIMO equalization," 1996 Conference Record of the Thirtieth Asilomar Conference on SIGNALS, SYSTEMS AND COMPUTERS, vol. 1, pp. 34-38, 3-6 November 1996, XP010231388, DOI : 10.1109/ACSSC.1996.600812, page 35, column 2, paragraph 4 through page 36, column 1.				<input type="checkbox"/>
	113	VOOK F W et al., "Adaptive antennas for OFDM", Vehicular Technology Conference, vol. 1, 18 May 1998 (1998-05-18), - 21 May 1998 (1998-05-21), pages 606-610, XP010287858, NEW YORK, NY, USA, IEEE, US DOI: 10.1109/VETEC.1998.686646 ISBN: 978-0-7803-4320-7.				<input type="checkbox"/>
	114	WYGLINSKI, Alexander. "Physical Layer Loading Algorithms for Indoor Wireless Multicarrier Systems," Thesis Paper, McGill University, Montreal, Canada, November				<input type="checkbox"/>

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		2004, page 109.	

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